First, the opportunity of increasing earnings while decreasing rates was just what price cap regulation was supposed to do. This aspect of mutual benefit was not just an understanding between regulators and carriers. Tangible benefits to carriers from cutting costs is what makes the price cap system work. If that benefit is removed, and increased earnings are "recaptured," the perverse incentives of ROR regulation creep back into the system (just as they would if the productivity factor were increased to recapture productivity gains).

Second, our earnings have not been unreasonable under the price cap orders themselves. Pacific Bell's final reported earnings in 1991 and 1992 were below the sharing benchmark. Our shareable earnings in 1993 were comparatively modest. That such earnings should be considered excessive and subject to recapture is a concept completely foreign to the price cap orders.[30]

Some other LECs have had much greater shareable earnings -- and some other LECs have had much lower earnings. That financial results should diverge in this way under price cap regulation is no surprise. Price cap regulation is supposed to imitate the results of competition, and one of the hallmarks of competition is that for almost every great success there is a great failure. What would be surprising is if the Commission

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[30] See Policy and Rules Concerning Rates for Dominant Carriers, 6 FCC Rcd. 2637, at para. 202 (1991). ("We have determined that overall earnings produced by rates that comply fully with price cap requirements will be just and reasonable").

overemphasized the relatively few examples of high earnings to suggest the whole price cap structure needs an overhaul.

Third, our earnings are not unreasonable by comparison to the market, nor are they unreasonable by comparison to the earnings of IXCs. Our earned interstate rates of return under price cap regulation (11.85%, 12.68% and 12.85% for years 1991, 1992 and 1993, respectively) are considerably below both the mean and median S&P 400 return on investment[31] and tend toward the bottom of the range of the S&P 400 returns. Also, as explained above (p. 30), low depreciation rates overstate our return considerably. When these factors are taken into consideration, our returns are, if anything, too low given current market conditions.

It is especially instructive to compare our earnings with AT&T's. AT&T is our largest customer, but also our largest competitor. In addition, AT&T's business is more directly comparable to our own enterprise than many of the S&P 400.

AT&T's earnings are enviable whether they come from its financial or regulatory results. In the financial books, Pacific Bell's revenues and net income have been flat for years. In 1988, revenues were $8.75 billion; in 1992, they were $8.74 billion. Our net income decreased over the same period, from $1.2 billion in 1988 to a little over $1.1 billion in 1992. Not so with AT&T. From 1988 to 1993, the net income of AT&T

[31] This comparison necessarily is limited to 1991 and 1992 since 1993 S&P 400 data is not yet available.

increased (adjusted for business restructuring and other charges) from $3.2 billion to $3.8 billion.

These figures come from AT&T's consolidated balance sheets and statements of cash flows; because they include losses from AT&T's subsidiary NCR, they understate AT&T's earnings from telecommunications services. Some indication of those earnings, however, can be gained from rate of return reports that AT&T files with the CPUC and the FCC. In California, AT&T's rate of return between 1988 and 1992 was consistently robust: AT&T earned 25.7% in 1988, 20.8% in 1989, 26.4% in 1990, 24.9% in 1991, and 25.3% in 1992 (through October).[32]

AT&T's interstate earnings are similarly healthy. AT&T reported total interstate earnings of 13.73% in 1990, 13.41% in 1991, 12.77% in 1992, and 13.49% in 1993.[33] On average, without even adjusting for differences in depreciation rates, these earnings exceed ours. Yet the only major changes to AT&T's price cap rules have been the removal of Baskets 2 and 3 from price cap regulation.[34]

Fourth, changes to the rate of return would be unreasonable because changes in interest rates and the cost of

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[32] See Notice of Ex Parte Communication, Janice Grau, Staff Counsel, Division of Ratepayer Advocates, A.90-07-015, I.85-11-013, A.87-10-039, December 22, 1992.

[33] See Interstate Rate of Return Reports of AT&T Communications, filed on April 1, 1992; March 31, 1992; March 31, 1993; and March 31, 1994.

[34] See Price Cap Performance Review for AT&T, 8 FCC Rcd. 6968, para. 32 (1993).

capital are already reflected in the GNP-PI. A ROR adjustment would penalize us twice: once, directly through such an adjustment itself, and once hidden in the GNP-PI. This is explained below, at p. 45.

Fifth, our risk profile, and therefore our required return on capital, has increased relative to other enterprises since 1988. As the Commission points out, significant events have occurred since then, and they have not gone unnoticed by the financial community. Industry analysts generally agree that the local telephone business is increasingly high-risk.

The Insight Research Corporation, in its recent report entitled "Competition in the Local Loop: Telcos, Cable TV and Wireless in the Emerging Telecommunications Network 1993-1998," concludes that "wireless phone technology and the crashing costs of fiber-optic transmission equipment have effectively shattered whatever bottleneck might have existed in the major metropolitan areas." Insight Research, p. 4. Insight adds:

> In 1993, the economic recovery combined with the emergence of new services -- especially digital cellular radio, PCS, interactive TV, and video dial tone -- has created opportunities for significant growth in local-loop services. These opportunities are also laying the foundation for a restructuring of the newly competitive local-loop services markets.... Competitors [are] entering the core business of the local telcos. Id. at 6.

Similarly, Donaldson, Lufkin & Jenrette, in a publication entitled "Local Telephone Competition Intensifies as Strategic Competitors Converge", states:

> The problem for the telcos is that they are or will be hit on all fronts -- by the ALTs [Alternative Local Transport, now commonly referred to as Competitive Access Providers (CAPs)] for high volume voice and data services downtown; by the cable companies for basic telephone, voice, data and video services in suburbia; by the wireless carriers (cellular/PCN) as a substitute for basic service (i.e., "wireless bypass"); and by the long distance carriers in the state and intraLATA toll markets.[35]

Francois Bar and Michael Borrus of the Berkeley Roundtable on the International Economy write:

> [A]lmost all major urban centers in the U.S. now have at least one AAP [Alternative Access Provider].... AAPs appear to have garnered up to a third of the access market in many cities, mostly as a result of serving the access needs of the IECs. And now, with a recent FCC decision on local exchange services, the AAP networks may be interconnected through the telcos to provide direct competition in the most lucrative switched services to local businesses. To be sure, AAP success is based on a pure cream-skimming strategy; but that only makes the competitive threat more daunting, aimed directly at the profitable services which could otherwise pay for upgrade of the overall telco network.[36]

In October, 1993, Bernstein Research, an investment analyst in New York, released a report entitled "The Looming Showdown in

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[35] Donaldson, Lufkin & Jenrette, "Local Telephone Competition Intensifies as Strategic Competitors Converge", May, 1992, p. 14.

[36] Bar and Borrus, "The Future of Networking in the U.S.," Berkeley Roundtable on the International Economy (1993), p. 18.

Local Telephony - High Valuations Offer Good Exit Opportunity." It states, "The stocks of most of the RBOCs are overvalued by historical measures, discount much higher earnings growth rates than have historically been achieved and have valuations which attach little risk to the competitive threat that lies ahead."

Bernstein Research adds:

> The domestic business operations of the RBOCs' greatest strategic competitors, the cable companies and the long distance carriers, have matured. These companies will increasingly focus their efforts on those opportunities which offer the greatest ability to leverage their current investment. These efforts will land them squarely in competition for the RBOCs' current revenue streams, using superior technologies of the future (wireless and cable/fiber), and in many cases using the assistance of RBOCs going outside of their home territories in a quest for superior returns.

Bear Stearns & Company says, "Regulation ... has skewed the playing field in traditional telephony against the RBOCs, by holding back competitive pricing, inflating the networks' cost structure (and, therefore, the RBOCs' cost of capital), and dampening opportunities to enter new markets."[37] Sanford Bernstein says, "As competitive alternatives to the local telcos develop, the operating margins of the local-exchange industry are expected to come under intense pressure. Beginning in 1995, we expect substantial margin erosion as a result of pricing pressure, steadily declining share in the most profitable

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[37] Paul Aran, "Cutting Through the Confusion," Bear Stearns & Company, February 14, 1994, p. 2.

markets, increases in sales and marketing spending, and increased depreciation expenses."[38]

Price cap regulation itself, as well as competition, has added to our business risk and therefore to the return that investors expect of us. Under rate of return regulation, if some services were priced below economic costs, other services could be priced sufficiently above economic costs to meet the "revenue requirement." Similarly, if depreciation rates took insufficient account of real economic lives, so that current rates were "too low," then depreciation costs were simply pushed out into the future, and capital was recovered from future customers.

We face enormously greater risks today. With growing competition, we have to predict not just total market demand, but our share of it. We must meet increasing demand for new services, but it is increasingly difficult to predict that demand because of cross-elasticity with other services and responses from our competitors. Regulators could not insure that we recover losses even if they wanted to, since they have little control over how much price competition we face in the marketplace. We cannot expect to recover our existing capital investment when depreciation rates are inadequate and competition is certain to grow over time. Even if regulators would let us increase future rates to recover past underdepreciation, we have no assurance that we could successfully compete with those prices in the markets.

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[38] Blake Bath, "Competicopia: Financial Implications of the Telco/Video Wars," Sanford Bernstein, October, 1993, p. 13.

D. Sharing and Low-End Adjustment Mechanisms.

As the Commission recognizes, the sharing and low-end adjustment mechanisms are not a necessary feature of price cap regulation. They "reduce efficiency incentives and ... increase the complexity of the plan." Notice, para. 53. The principal reason for them was that "if the productivity factor was an erroneous measure of productivity for an individual price cap LEC, the productivity factor might produce unintended and undesirable results." Id. Thus the Commission asks whether the sharing and low-end adjustment mechanisms remain necessary, or whether they can be replaced by adjustments to the productivity factor or other aspects of the plan. Id.

The Commission also suggests that if the sharing and low-end adjustment mechanisms are retained, the rate of return thresholds triggering their application may need to be revised. The Commission notes that they were based on the LECs' cost of capital in 1988, and that interest rates are now much lower.

The single biggest improvement the Commission could make to the price cap rules would be the elimination of earnings limitations. As we explained above, earnings limitations not only blunt the incentive to be efficient, but make investment in our networks artificially unattractive. This disincentive to invest in the network exacerbates almost every other issue having to do with the LECs: universal service, pricing, depreciation,

service quality, unequal terms of competition, are all affected by it.

The original purpose of the backstop mechanisms was to correct for possible errors in the productivity factor, so that carriers' earnings were neither too high nor too low. We have now had enough experience with price cap regulation to know that sharing and the low end adjustment mechanisms are not needed to correct for errors in the productivity factor. Both backstop mechanisms should be eliminated.

Baseline Issue 4a: Whether the sharing and low-end adjustment mechanisms should be realigned with capital costs.

The answer is no, for several reasons. First, although long-term interest rates declined until recently, they are currently quite volatile and are not far below the levels when our rate of return was last represcribed.[39]

Second, the cost of equity makes up the majority of our cost of capital, and declines in interest rates are generally not fully matched by declines in the return on equity. Add to this the increase in our business risk relative to other industrial issues (which leads investors to expect a commensurately higher

[39] See Refinement of Procedures and Methodologies for Represcribing Interstate Rates of Return for AT&T Communications and Local Exchange Carriers, Represcribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers, 5 FCC Rcd. 197 (1989).

return),[40] and it isn't at all clear that our cost of capital has declined. For reasons explained below (p. 46), it's unlikely the Commission could fairly determine the cost of capital from the record in this proceeding.

Third, declines in the cost of money are already reflected in the GNP-PI. Adjusting rates or sharing thresholds is unnecessary to reflect changes in the cost of money and would amount to double-counting. The GNP-PI is an output index that measures inflation for the overall U.S. economy. As such, it reflects the changes in the costs of all inputs to the production process. This includes all the factors, including interest rates, that affect labor costs, nonlabor costs and capital costs.

With price cap regulation, the opportunity to earn more profits is conditioned on the assumption of more risk. Changes in the cost of capital and the vagaries of interest rate movements are such a risk. Many factors that affect the cost of operation and anticipated revenues can change. Labor rates may grow faster or slower than anticipated; the prices for network components can change; and volumes may change in unanticipated ways. ROR regulation accounts for such events individually; price cap regulation accounts for them with a general inflation index. For example, if our labor rates have gone up faster than expected, it is likely to have resulted from general inflation in the cost of labor, which will be reflected in the GNP-PI factor.

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[40] Application of Pacific Bell (U 1001 C), a Corporation, for Review of the Regulatory Framework Adopted in Decision 89-10-031, Application 92-05-004, Dr. James H. Vander Weide Direct Testimony, pp. 14-19, filed April 8, 1993.

Capital is an input into the production process of a firm, just as labor is. We assume the risk that changes in the cost of our inputs may differ from changes in the GNP-PI.

Thus, it is no more justified to adjust prices under price cap regulation for changes in the cost of capital than it is to adjust them for changes in any other input (such as labor) in the GNP-PI.

Price cap regulation would also be excessively complicated by any review of interest rate movements and triggers. Any rate adjustment would require looking at all items typically considered in a rate of return prescription proceeding. A short list includes: the mix of equity and debt; interest rates; embedded, projected debt costs; cost of equity methodologies; cost of equity variables; measurement of changes in investor-perceived risks; business risk; financial risk balances; dividend expectations and expectations for future growth.

The record of this proceeding will be hopelessly inadequate to such a task. More important, it's foreign to the whole rationale for price cap regulation. Changes in the cost of money are, like other changes in input costs, treated as endogenous under the price cap plan and assumed to be captured in the GDP-PI and productivity factors. Adjusting our rates or thresholds for endogenous events is an example of selective creep-back toward ROR regulation.

Baseline Issue 4b: Whether the sharing and low-end adjustment mechanisms should be revised or eliminated.

The answer is yes. Under sharing, we are allowed to keep only a fraction of efficiency gains. This reduces efficiency incentives and efficiency gains. Sharing mechanisms have the added drawback of making it more difficult to streamline the regulation of selected services.

There are two principal benefits of pure price cap regulation. First, it provides incentives more like those found in competitive markets. It fosters investment and operating decisions based solely on business considerations. With our prices capped, our primary means to increase earnings is to improve efficiency and to innovate in the provision of services. Thus, price cap regulation severs the direct link between prices and costs and eliminates the perverse incentives embedded in traditional ROR regulation.

Second, price cap regulation establishes maximum annual prices for groups of services to prevent monopoly pricing and cross-subsidies. Earnings limitations (including the LFAM) run directly contrary to this. See below, p. 108.

Sharing plans can leave customers at risk, since they share in the costs of unsuccessful investments or inefficient management decisions. Sharing, by design, limits the incentives for efficiency, innovation and good performance. In competitive industries, firms that perform better than the industry average earn profits above their cost of capital; firms that perform below average earn less than their cost of capital. Sharing

plans are more costly and complex to administer, because they require at least as much measuring, allocating, and regulating of costs and earnings as ROR regulation. Price cap regulation overlaid by ROR regulation, which is what we have today, is administratively the worst of both worlds.

Eliminating earnings limitations would also permit decisions about placing and retiring plant to be made solely for business reasons. Costs that we incur due to early retirement of plant could be treated endogenously, and realistic depreciation lives could be allowed without fear that we would use them to manipulate rates or sharing. As Commissioner Barrett has written,

> Endogenous treatment of depreciation rate changes is necessary to maintain the desired incentive structure of price caps, and is important in providing price cap carriers with incentives for efficiency and productivity. The Commission has aptly recognized that, "Some of the most basic decisions a carrier must make in its quest for improved productivity have to do with the deployment of plant", and that exogenous cost treatment of changes in the depreciation expense would distort proper decision making and the desired incentives.
>
> [C]onsistency and equity dictate that endogenous treatment of depreciation rate changes be accompanied by the grant to carriers -- in particular local exchange carriers (LECs) regulated under price caps -- of as much control over depreciation rates and expense as is feasible, consistent with prevailing competitive and regulatory circumstances. In my view, this item highlights the need for the Commission to be aggressive in pursuing reform of its depreciation practices and to ensure that

> those practices not lag significant market and technological developments.[41]

Commissioner Barrett got it right. Until the backstop mechanisms are eliminated, and our prices and earnings are allowed to reflect "costs" as defined by every other business that is subject to competition, meaningful regulatory reform will be impossible.

E. Common Line Formula.

Baseline Issues 5a, 5b, 5c, and 5d. The Commission asks whether it should reconsider its use of the Balanced 50/50 formula to cap common line charges; what other method it should use; how a per-line charge would affect possible changes in the productivity factor or the composition of baskets; what incentives are generated by the current Balanced 50/50 formula, the per line formula, or other possible formulas. NPRM, paras. 58, 59.

The carrier common line charge is a subsidy from long distance users to basic exchange costs. The Commission realized the problem with this as early as 1986, when it said:

> The common line revenue requirement, which consists principally of the costs of providing the local loop between the end user and the telephone company's central office,

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[41] Petition for Waiver of the Commission's Rules to Recover Network Depreciation Costs, 9 FCC Rcd. 377 (1993) (Separate Statement of Commissioner Andrew C. Barrett).

> is collected through two rate elements -- the SLC and the CCLC.... Revenues obtained from the SLC are subtracted from the total common line revenue requirement to yield the carrier common line (CCL) revenue requirement, which is recovered from IXCs through the CCLC, a charge per access minute of use.... This loading of interstate toll rates with NTS costs on a usage-sensitive basis requires high-volume users of the public switched network to pay substantially more of NTS costs than do low-volume toll users and to pay substantially more than the NTS costs associated with providing their own local loops. This system thus provides incentives for high-volume users to seek alternative methods of access to their IXCs under which they pay charges more in line with the costs they cause in obtaining access.[42]

The problem is actually worse today, since bypass requires less and less volume to be attractive. It was highlighted by a recent petition filed by NYNEX to reduce common line usage charges and replace the revenues, in part, with a nonusage-sensitive charge.[43] That CCL charges are subject to competitive pressures is easily demonstrated by the fact that CCL charges are widely priced below their caps. In fact the Commission cited below-cap pricing as evidence of competition in AT&T's Basket 2 and 3 services, which it has removed from price cap regulation.[44]

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[42] Petitions for Waiver of Various Sections of Part 69 of the Commission's Rules, 104 F.C.C.2d 1132, para. 9 (1986).

[43] See NYNEX Plan to Preserve Universal Service in a Competitive Environment, DA 93-1537.

[44] See Price Cap Performance Review for AT&T, 8 FCC Rcd. at 6968, 6970 (1993).

The 50/50 formula is a living fossil, a vestige of ROR regulation that's necessary only because of an obsolete rule that requires NTS costs to be recovered by a traffic sensitive charge. It increases rather than decreases the cost of regulatory administration, and preserves the perverse incentives of ROR regulation.

The Commission should allow price cap carriers flexibility to reduce or eliminate the CCL charge and permit a cap on all end user common line charges of $6.00 (the current cap on multi-line business lines).[45] For carriers recovering these nontraffic sensitive costs with a nontraffic sensitive line charge (e.g., the EUCL), the MOU growth issue (g/2) would be moot. If the Commission decides the price cap formula should continue to contain a productivity factor, the MOU growth issue is also moot if that factor is based on direct TFP growth (see above, p. 31).

The "leaky PBX" surcharge should be eliminated. What we need to respond to competition is real reform, not a self-reported tax on "leaky" networks. In 1992, despite the large volumes of intraLATA traffic that we know are transported on virtual private networks such as MEGACOM (see below, p. 72), we collected just $1.5M in special access surcharges on a base of over $200M for interstate special access services. This is a decline of more than 50% since 1989.

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[45] As CCL charges are reduced, IXCs should be required to flow through the reductions to end users, so they are assured of benefiting.

Carriers should be free to recover nontraffic sensitive costs in the way that best suits their markets. This will not automatically mean higher EUCLs, though that should remain an option. Competitive pressures will exert downward pressure on end user common line charges, as PCS, cable TV, and cellular loops all come on line. In addition, as we have shown above (in "Universal Service"), loop prices based on economic costs, combined with continued Lifeline and USF programs, would probably increase rather than decrease telephone penetration.

F. Exogenous Cost Changes.

The Commission proposes to limit exogenous cost changes to "economic cost changes that might be expected to affect prices in competitive marketplaces." Notice, para. 64. The Commission also suggests further limiting such changes to "cost changes that solely affect telephone companies or similar companies such as utilities." Id., para. 65.

Baseline Issue 6a: Whether the number of cost changes currently eligible for exogenous treatment under price caps should be reduced.

Baseline Issue 6b: If so, which cost changes should be eligible for exogenous treatment under price caps.

Baseline Issue 6c: Whether we should adopt an administrative process to allow access customers or other groups to request cost changes eligible for exogenous treatment and, if so, what should be the procedures in such an administrative process?

The Commission proposes to reduce the categories of cost changes eligible for exogenous treatment "where this will improve price cap efficiency incentives." NPRM, para. 64. For example, the Commission proposes excluding GAAP changes because "a GAAP change may represent only a change in how books are kept and costs are recorded, not an economic cost change that might be expected to affect prices in competitive marketplaces." The Commission therefore observes that perhaps "only economic cost changes as eligible for ... exogenous treatment." Id.

This would, indeed, be a complete departure from ROR principles. Under ROR regulation, rates have little or nothing to do with economic costs, and everything to do with "how books are kept and costs are recorded." But as we have pointed out, the current rules retain many vestiges of ROR regulation. Booked costs continue to be relevant to rates under price caps because the price caps were initialized by reference to booked costs. We are monitored and required to share earnings based on booked costs, not on economic costs. We are required to justify new services based on booked costs, not on economic costs. Most fundamentally of all, perhaps, booked costs drive separations -- and the Commission has hitherto regarded separations rule changes as the classic example of an exogenous cost change, even though they are not changes in "economic costs". Thus even today the Commission directs us to calculate costs and earnings not as they are calculated in other competitive marketplaces, but more or less as they were made under ROR regulation.

A far-reaching program to do away with all vestiges of ROR regulation, as we have advocated, would be consistent with limiting exogenous changes to "economic costs." But if the Commission retains the backstop mechanisms and other features of the rules that are driven by booked costs, it would make no logical sense to deny us the opportunity to adjust those booked costs as good accounting practice dictates. It is bad enough that booked costs continue to dictate so much of what we do. It will only be worse if the Commission doesn't allow the booked costs that we are required to reflect in our prices to reflect good accounting practice.

Contrary to the Commission's suggestion that the exogenous adjustment formula may lead us to "request exogenous treatment only for those [changes] that might generate increases in the cap, not those that might justify reductions," (NPRM, para. 65), nearly all exogenous cost adjustments have reduced our rates. The few exogenous rate increases that price cap LECs have sought have been extremely contentious and received full scrutiny.

Limiting cost changes to "economic" ones would not make the process less conte

ntious. Booked costs may be affected by differing interpretations of accounting rules, but at least they are defined by rules, some of which reasonable people agree upon. Attempting to define, let alone calculate, "economic costs" would be something else again, because no two economists agree on what they are. It is easy to imagine that any attempt to define and

calculate "economic costs" -- for example, by examining the effect of an event on cash flow -- would lead, in circular fashion, right back to GAAP (to calculate "cash flow"). Their role in clarifying the terms of the debate is one reason accountants continue to have jobs, despite economists' reminders that business decisions are not really driven by accounting costs.

Unless the Commission eliminates all vestiges of ROR regulation from its price cap program, the opportunity to make exogenous cost change adjustments for changes to GAAP and the Commission's Part 36 and 69 rules ought to be continued.

G. Service Quality.

The Commission asks whether it should increase or revise the monitoring of the LECs' network reliability, service quality, and infrastructure development. In particular, it requests comment on whether monitoring should be extended to facilities and services that may soon be interconnected with or provide capabilities similar to the local telephone network, e.g., wireless services or coaxial cable. As price cap LECs use wireless services, coaxial cable, and other facilities and services to perform the same functions and meet the same needs as existing facilities, the Commission observes, it may be appropriate to expand our service quality monitoring accordingly.

Baseline Issue 7a: Whether the Commission should increase or revise the monitoring of the LECs' network reliability, service quality, and infrastructure development. Commenters are requested to submit data, information, and proposals in this inquiry that in their view will contribute to assuring state-of-the-art reliability, service quality, and infrastructure development for the LECs. Commenters are also requested to submit data identifying the administrative and business costs associated with their proposals.

Infrastructure monitoring of carrier networks could be revised as new technologies are deployed. For example, Table I of the Infrastructure Report for Switching Equipment could be expanded to include the number of local switches equipped with Advanced Intelligent Network (AIN) capabilities, Synchronous Optical Network (SONET) interfaces, and the number of lines served by those switches. These items could be reported on a MSA or non-MSA basis.

The Switching Equipment report could also be expanded to include the number of switches and the number of ports equipped for Asynchronous Transfer Mode (ATM), Switched Multimegabit Data Service (SMDS), Frame Relay and Broadband Integrated Services Digital Network (BISDN). The number of Mobile Switching Centers (MSCs) and Radio Port Control Units (RPCUs) could also be reported, on a total study area basis, similar to access tandem reporting.

Table II of the Infrastructure Report for Transmission Facilities could also be expanded to include sheath miles of coaxial cable and the number of equivalent DS3s on SONET. The number of interoffice facility systems with physically diverse routes could also be reported, the number of fiber rings and the number of locations served by those rings. (We define fiber

rings as fiber from a central office to customer premises, with a secondary fiber protection occupying an alternate and separate path from the primary fiber).

The "Average Interval" measurement, on ARMIS Report 43-05 Tables I and II, should be eliminated. This measurement is of the average interval in business days between the day the service order was placed and the day service was completed, excluding orders having commitment dates set by customers. The measurement is not consistent with the "service when you want it" principle upon which virtually all competitive carriers base their commitment dates. It also doesn't measure the LEC's performance.[46]

The Commission should require that all carriers (IXCs, CAPs, and LECs) report on the same basis. This is important for two reasons: 1) The carriers' networks are linked into one large network, and the reliability and quality of the overall network depend on each part. 2) As with other reporting requirements, unless reporting requirements for reliability and quality are equal for all competitors, some competitors will receive an unearned marketplace advantage.

We also propose that our competitors report certain information about their networks to assist the Commission in

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[46] Many business customers contact us well in advance of the actual date desired for the start of service. Reporting the "raw" number of days in the installation intervals may reflect differences among carriers but those differences may not reflect significant distinctions in their performance quality. In fact, our ability to trade off some long intervals with some very short intervals allows us the flexibility to meet much shorter intervals than a standard interval might allow.

determining which markets are competitive. We explain more about this below, at p. 70.

Baseline Issue 7b: Whether and if so how the Commission should expand its service quality monitoring to include price cap LEC facilities and services that may be interconnected with the local exchange network or used to provide similar capabilities, including wireless services and coaxial cable. Commenters are requested to submit specific data on the administrative and business costs associated with their recommendations on the reporting requirements.

The service quality reporting of telephone service should be kept separate from other services, such as broadband. The video transport components of the network, for example, should not necessarily be designed to the same level of reliability as the telephony components. Obviously, most video services are not as "mission critical" as basic telephone service. In addition, Pacific would not control all the elements of a video product offering. Even if we are a common carrier providing transport services, an information provider may be responsible for content transmission or other key elements of customer service. Reporting of service quality for non-telephony elements may be appropriate, but only if there is symmetry between what we report versus other providers in the market, and the reporting reflects the limited service elements within our control.

These are some of the specific reporting differences we see for broadband service versus basic telephony:

Installation and repair intervals. We expect most customer installation activity and trouble reporting to be based

on customer premises equipment beyond the interface unit with our network. This portion of the business would be handled by an information provider, whether our own affiliate or someone else. Measurements would need to be changed to reflect this division in responsibility.

Switch downtime. Not all video is switched. Some interactive services will have a switched video component. Our reporting diagnostics should be similar to those we might submit to on our existing ATM product.

Service Quality Complaints. These will be difficult to measure. Distinguishing between the Information Provider (IP), CPE, and the network will not always be easy. While there is a distinction between CPE and our network today, broadband services will be much more complex, incorporating many different technologies and requiring several providers to enable service.

Trunk Blockage. Trunk blockage reporting is not appropriate for a broadband network. Port and/or bandwidth exhaust might be more appropriate. Even with such a measurement, however, it might be difficult to distinguish between failures in the IP's network and our own. Blocking might occur in any of several places. The IP could block at the level 2 gateway, we could block at an ATM switch, interoffice transport, or in the local loop.

Dial Tone Response and Transmission Quality. While there is no real "dial tone" in the video world, there is connection response time. Again, this may be affected by the common carrier's component or the IP's.

H. Rates and Regulations for New Services.

Baseline Issue 8a: Whether the LEC price cap new services requirements impose unnecessary regulatory impediments to the development and introduction of new services, with specific identification of what those impediments are and an assessment of their magnitude.

Baseline Issue 8b: Whether, and how, we should modify the LEC price cap new services procedures and cost support rules to ensure that these rules advance our goals of encouraging innovation and setting reasonable rates.

Baseline Issue 8c: Whether new services are available on an equal basis to all LEC customers. Whether we should revise the LEC price cap plan to ensure the universal availability of new services. How widely available have LECs made new services to their customers?

The Commission could take major steps toward ending disincentives to innovation and investment by reforming its regulation of new services. The current rules make new services cumbersome to introduce and dampen the incentive to do so. Reforming the new service rules would be a good place for a cautious regulator to start zero-based regulation, because the effects of reform could be observed on just one service at a time.

In free markets, innovators are rewarded with the ability to earn market-based returns for new products and services. Innovation is encouraged by the inventor's ability to recover a market-based premium for the new product or service until competition (often rapidly, in the absence of a patent or some other exclusive right) increases the number of suppliers and reduces the price. Both the premium for innovation, and the role